AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A vacuum pump comprising:

a stator;

a rotor adapted to rotate relative to the stator for pumping fluid from an inlet to an outlet; and

a continuous ignition source for igniting fuel within a pumped fluid in the stator to regulate the concentration of the fuel in fluid exhaust from the pump[[.]],

wherein the pressure of pumped fluid at the ignition source is in the range from 50 to 950 mbar.

2. (Previously Presented) The pump according to claim 1 wherein the continuous ignition source is an electric discharge device.

3. (Previously Presented) The pump according to claim 1 wherein the continuous ignition source is a spark plug.

4. (Previously Presented) The pump according to claim 1 wherein the continuous ignition source is a heated filament.

5. (Previously Presented) The pump according to claim 1 wherein the continuous ignition source is a plasma.

6. (Previously Presented) The pump according to claim 1 comprising a multi-stage vacuum pump and the continuous ignition source is located between adjacent stages of the pump.

7. (Currently Amended) A multi-stage vacuum pump comprising[[,]]:

a plurality of stages of pumps, each of which includes a stator and a rotor adapted to rotate relative to the stator for pumping fluid through the stages of pumps; and

~~between adjacent stages of the pump,~~ a continuous ignition source between adjacent stages of the pumps for igniting a fuel within a pumped fluid in the stator[[.]],

wherein the pressure of pumped fluid at the ignition source is in the range from 50 to 950 mbar.

8. (Previously Presented) The pump according to claim 7 wherein the continuous ignition source is located within a combustion chamber.

9. (Previously Presented) The pump according to claim 7 comprising a plurality of continuous ignition sources each located between respective adjacent stages of the pump.

10. (Cancelled)

11. (Previously Presented) The pump according to claim 1 comprising means for injecting into the pump a fluid stream comprising an oxidant for assisting in igniting the fuel.

12. (Previously Presented) The pump according to claim 11 wherein the oxidant is one of oxygen and CDA.

13. (Previously Presented) The pump according to claim 11 wherein the injected fluid stream also comprises a fuel for increasing the likelihood of ignition occurring within the pump.

14. (Previously Presented) The pump according to claim 11 wherein the injection means is arranged to inject the fluid stream between adjacent stages of the pump.

15. (Previously Presented) The pump according to claim 27 wherein the fluid stream is injected into the combustion chamber.

16. (Currently Amended) A method of treating a fluid containing a fuel, the method comprising conveying the fluid to a vacuum pump and, within the pump, igniting the fuel to regulate the concentration of the fuel in fluid exhaust from the pump[[.]], wherein the pressure of the ignited fuel in the vacuum pump is in the range from 50 to 950 mbar.

17. (Previously Presented) The pump according to claim 6 wherein the continuous ignition source is located within a combustion chamber.

18. (Previously Presented) The pump according to claim 6 comprising a plurality of continuous ignition sources each located between respective adjacent stages of the pump.

19. (Previously Presented) The pump according to claim 8 comprising a plurality of continuous ignition sources each located between respective adjacent stages of the pump.

20. (Cancelled)

21. (Cancelled)

22. (Previously Presented) The pump according to claim 7 comprising means for injecting into the pump a fluid stream comprising an oxidant for assisting in igniting the fuel.

23. (Previously Presented) The pump according to claim 10 comprising means for injecting into the pump a fluid stream comprising an oxidant for assisting in igniting the fuel.

24. (Previously Presented) The pump according to claim 12 wherein the injected fluid stream also comprises a fuel for increasing the likelihood of ignition occurring within the pump.

25. (Previously Presented) The pump according to claim 12 wherein the means for injecting is arranged to inject the fluid stream between adjacent stages of the pump.

26. (Previously Presented) The pump according to claim 13 wherein the means for injecting is arranged to inject the fluid stream between adjacent stages of the pump.

27. (Previously Presented) The pump according to claim 8 comprising means for injecting into the pump a fluid stream comprising an oxidant for assisting in igniting the fuel.

28. (Previously Presented) The pump according to claim 27 wherein the oxidant is one of oxygen and CDA.

29. (Previously Presented) The pump according to claim 27 wherein the fluid stream is injected into the combustion chamber.

30. (Previously Presented) The pump according to claim 28 wherein the fluid stream is injected into the combustion chamber.

31. (Previously Presented) The pump according to claim 28 wherein the injected fluid stream also comprises a fuel for increasing the likelihood of ignition occurring within the pump.

32. (Previously Presented) The pump according to claim 31 wherein the means for injecting is arranged to inject the fluid stream between adjacent stages of the pump.

33. (Cancelled)